Clinical diagnosis

Case 28

4. Paraurethral (Skene gland) abscess

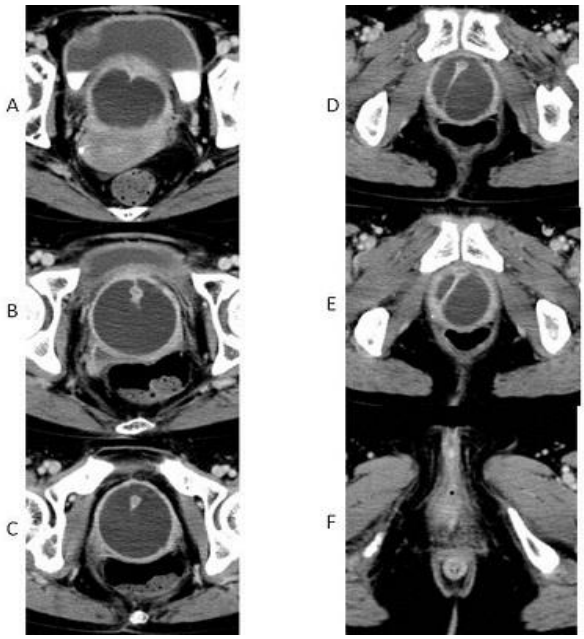

Fig. 1 Axial images of contrast-enhanced CT depict urethra inlet (A), urethra itself (B, C, D, E) and urethra outlet (F) surrounded by cystic lesion with thick outer capsule (A-E) and inner septum (B, D, E).

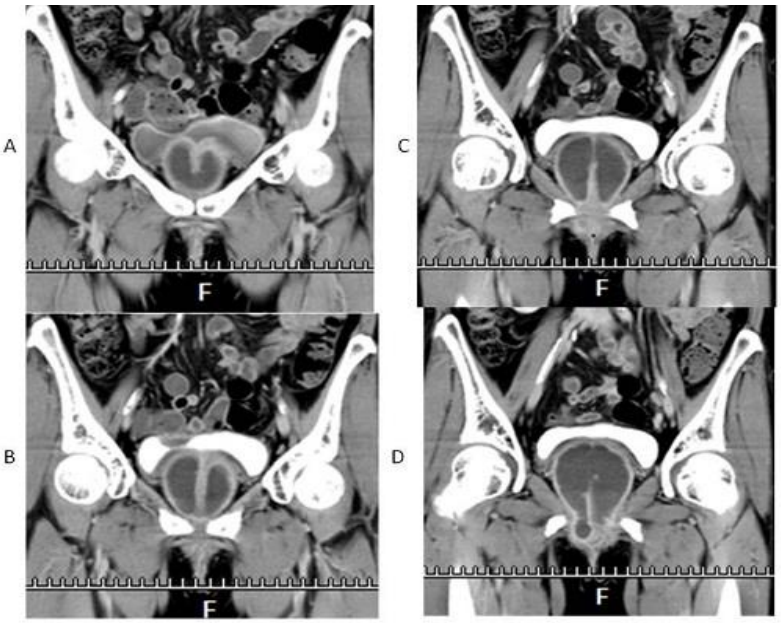

Fig. 2 Coronal images of contrast-enhanced CT depict urethra inlet (A), urethra itself (B, C, D) and urethra outlet (D) surrounded by cystic lesion with thick outer capsule (A-D).

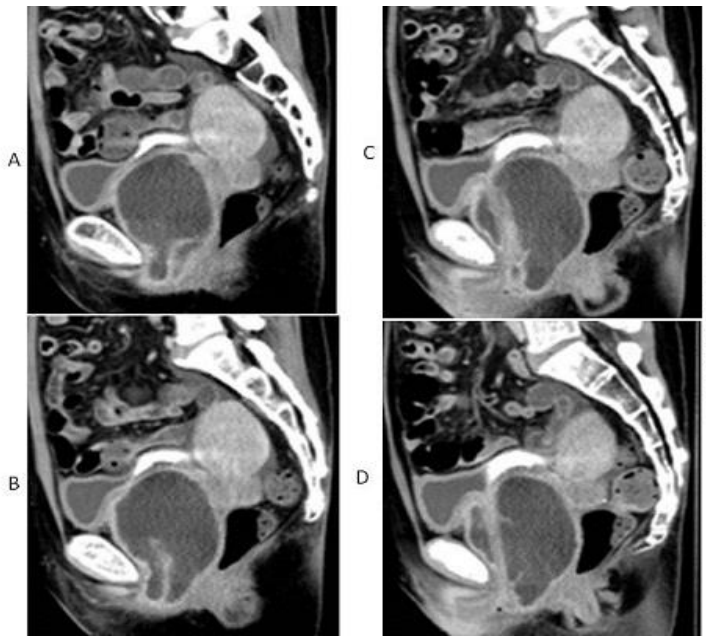

Fig. 3 Sagittal images of contrast-enhanced CT depict urethra inlet (C), urethra itself (C, D) and urethra outlet (C, D) surrounded by cystic lesion with thick outer capsule (A-D) and inner septum (A, D).

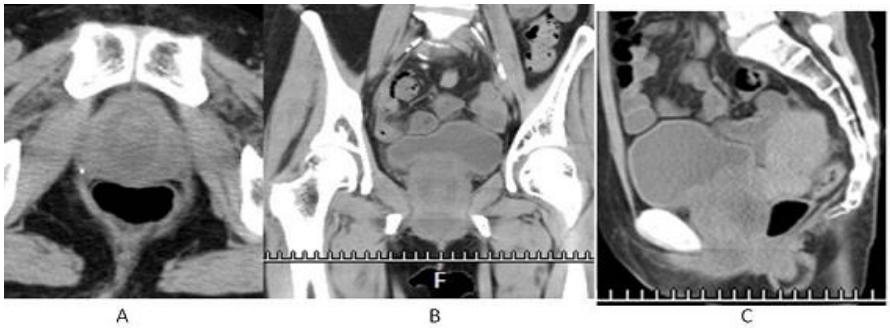

Fig. 4 The following day, abscess fluid excreted from urethra probably because of the fistula between urethra and periurethral abscess. Axial image (A), coronal image (B) and sagittal image (C) on non-enhanced CT depicted relative shrinkage of the abscess compared to Fig. 1D, Fig. 2C and Fig. 3D before excretion, respectively.

【Progress】

The following day, she called us the yellowish fluid coming out from the vagina. The abscess fluid was confirmed to be excreteed from vagina which was suspected the presence of the fistula between urethra and periurethral abscess. Non-enhanced CT showed the relative shrinkage of the abscess though still existed(Fig.4). Since we did not have urologists in our hospital, we introduced her to the other hospital for further treatment.

【Discussion】

Female paraurethral abscess is reported to occur urethral diverticulum or Skene's cyst (1). Female urethral diverticulum present accompanied with aging with the incidence of 1.4 % to 5 % (1, 2). It arises from the wall of urethra and consists of fibrous tissue lined with epithelium. The most accepted mechanism of forming urethral diverticulum is that periurethral gland ducts initially occlude and then, secondary infection occurs, inducing abscess formation (2). The abscess subsequently ruptures into the urethral lumen, forming the diverticulum (2). It might be adherent to the neighboring structure such as periurethral fascia and anterior vaginal wall.

Meanwhile, Skene glands develope in adults and locate as a pair, lateral to the urethra opening (meatus) (3, 4). They drain into urethra or near the urethral opening. They swell and ejaculate fluid during sexual activity (3). Further, when examined with electron microscope, Skene glands show the similar gland structure as prostate in male. Then, they are called as female prostate (3,4). When Skene gland duct is obstructed due to infection, Skene gland cyst is enlarging, followed by abscess.

In our case, the age was sixties. CT showed a large abscess which located bilateral to the urethra, compressing and surrounding urethra with septum in the abscess cavity. The septum might correspond to septum of the gland or periurethral fascia (Figs 1-3). Based on the bilateral growth surrounding the urethra, our paraurethral abscess is considered to be originated from Skene gland rather than from urethral diverticulum. Surgical excision is evaluated as a safe and effective therapy after conservative measures have failed (2, 5). Our

【Summary】

We present a case of sixties suffering from repeated dysuria. Contrast-enhanced CT showed a large low density mass with thick capsule, existing bilateral to the urethra, compressing and surrounding the urethra. The following day, the pus fluid came out from vagina. Our paraurethral abscess is considered to arise from Skene gland rather than peirurethral diverticulum because Skene glands exist bilateral to the urethra such as prostate in male.

We should keep in mind that the mass bilateral to the urethra arise from the Skene gland.

【References】

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back